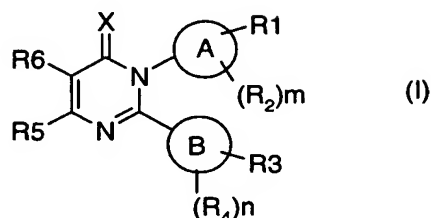


**Claims:**

1. Novel pyrimidones of the formula (I)



their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, and their pharmaceutically acceptable salts, wherein X represents oxygen, sulfur or NR, wherein R represents hydrogen, hydroxyl, acyl, alkyl, alkoxy, aryl, amino, hydroxylamino, alkylamino, arylamino, acylamino, alkoxyamino group; the rings represented by A and B are selected from aryl or heteroaryl; R<sup>1</sup> and R<sup>3</sup> may be same or different and independently represent hydrogen, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>; R<sup>2</sup> and R<sup>4</sup> may be same or different and independently represent hydrogen, halogen, hydroxyl, nitro, cyano, azido, nitroso, amino, formyl, alkyl, haloalkyl, acyl, alkoxy, monoalkylamino, dialkylamino, acylamino, alkoxycarbonyl, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>, alkoxyalkyl groups or carboxylic acids or its derivatives; R<sup>5</sup> and R<sup>6</sup> may be same or different and independently represent hydrogen, halogen, hydroxyl, nitro, cyano, azido, nitroso, amino, formyl, alkyl, aryl, aralkyl, haloalkyl, acyl, alkoxy, aryloxy, aralkoxy, heteroaryl, heterocyclyl, monoalkylamino, dialkylamino, acylamino, alkoxycarbonyl, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>, alkoxyalkyl groups or COR<sup>9</sup>; R<sup>7</sup> represents hydrogen, alkyl or aryl; R<sup>8</sup> represents halogen, alkyl, amino, acylamino, arylamino or aryl group; R<sup>9</sup> represents hydrogen, hydroxyl, amino, halogen, alkyl, alkoxy, aryloxy, monoalkylamino, dialkylamino, acylamino, arylamino, groups; m is an integer and is in the range of 0 to 4; n is an integer and is in the range of 0 to 4; p represents an integer of 1 or 2; with a proviso that when R<sup>1</sup> represents hydrogen R<sup>2</sup> is not hydrogen.

2. Novel pyrimidones of the formula (I) as claimed in claim 1, wherein the ring systems represented by A and B are selected from phenyl, naphthyl, pyrrolidinyl, morpholinyl, thiomorpholinyl, piperidinyl, piperazinyl, pyridyl, thienyl, furyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl, tetrazolyl, pyrimidinyl, benzopyranyl, benzofuranyl, benzimidazolyl, benzoxazolyl, benzothiazolyl, benzopyrrolyl, benzoxadiazolyl, benzothiadiazolyl, quinolinyl, isoquinolinyl, benzothienyl, benzofuranyl or indolyl.

3. Novel pyrimidones of the formula (I) as claimed in claim 1, which are selected from:

5-Cyano-2-(4-chlorophenyl)-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Cyano-2-(4-fluorophenyl)-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Cyano-2-phenyl-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Cyano-2-(trifluoromethylphenyl)-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Cyano-2-[(4-methylthio)phenyl]-4-(methylthio)-1-[4-fluorophenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Cyano-1-(4-methylphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine

5-Cyano-2-[(4-methylsulphonyl)phenyl]-4-(methylthio)-1-[4-methylphenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Carboxy-2-[(4-methylthio)phenyl]-4-(methylthio)-1-[4-methylphenyl]-6-oxo-1,6-dihydropyrimidine ;

5-Cyano-1-(4-isopropylphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(3,4-dimethylphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(4-isopropylphenyl)-2-[4-(methylsulfonyl)phenyl]-4-(methylthio)-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(3,4-dimethylphenyl)-2-[4-(methylsulfonyl)phenyl]-4-(methylthio)-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(3,4,5-trimethoxyphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(4-ethylphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

1-(4-Bromophenyl)-5-cyano-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(4-methoxyphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(4-fluorophenyl)-4-(methylthio)-2-phenyl-6-oxo-1,6-dihydropyrimidine;

1-(4-Chlorophenyl)-5-cyano-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(2,4-dimethylphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-2-(4-methylphenyl)-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(4-methoxyphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

1-(4-tert-Butylphenyl)-5-cyano-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Cyano-1-(4-methylphenyl)-4-(methylthio)-6-oxo-2-phenyl-1,6-dihydropyrimidine;  
 1-(4-n-Butylphenyl)-5-cyano-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 5-Cyano-1-(4-fluorophenyl)-4-(methylthio)-6-oxo-2-pyridin-4-yl-1,6-dihydropyrimidine;  
 5-Cyano-1-(4-fluorophenyl)-4-(methylthio)-6-oxo-2-pyridin-3-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-2-pyridin-3-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-2-pyridin-4-yl-1,6-dihydropyrimidine;  
 5-Cyano-1-(4-fluorophenyl)-4-(methylthio)-6-oxo-2-pyridin-2-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-2-pyridin-2-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-(4-methoxyphenyl)-6-oxo-2-pyridin-2-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-(3,4-dimethylphenyl)-6-oxo-2-pyridin-2-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-(4-ethylphenyl)-6-oxo-2-pyridin-2-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-(4-methylphenyl)-6-oxo-2-pyridin-2-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-(4-ethoxyphenyl)-6-oxo-2-pyridin-4-yl-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylthio)-1-(4-methylphenyl)-6-oxo-2-pyridin-4-yl-1,6-dihydropyrimidine;

5-Cyano-4-(methylthio)-1-(4-isopropylphenyl)-6-oxo-2-pyridin-4-yl-1,6-dihydropyrimidine;

5-Cyano-4-(methylthio)-1-(4-ethylphenyl)-6-oxo-2-pyridin-3-yl-1,6-dihydropyrimidine;

5-Cyano-4-(methylthio)-1-(3,4-dimethylphenyl)-6-oxo-2-pyridin-3-yl-1,6-dihydropyrimidine;

5-Cyano-4-(methylthio)-1-(4-methoxyphenyl)-6-oxo-2-pyridin-3-yl-1,6-dihydropyrimidine;

Ethyl 1-(4-methylphenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine-5-carboxylate;

Ethyl 1-(4-fluorophenyl)-4-(methylthio)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine-5-carboxylate;

Ethyl 2-(4-fluorophenyl)-4-(methylthio)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine-5-carboxylate;

5-Carboxamido-1-(4-methylphenyl)-4-(methylsulfonyl)-2-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Carboxamido-1-(4-methylphenyl)-2-[4-(methylsulfonyl)phenyl]-6-oxo-4-piperazin-1-yl-1,6-dihydropyrimidine;

5-Carboxamido-4-(methylamino)-1-(4-methylphenyl)-2-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Carboxamido-1-(4-methylphenyl)-2-[4-(methylsulfonyl)phenyl]-4-morpholin-4-yl-6-oxo-1,6-dihydropyrimidine;

5-Carboxamido-2-(4-fluorophenyl)-4-(methylsulfonyl)-1-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;

5-Carboxamido-2-(4-fluorophenyl)-4-(methylamino)-1-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;

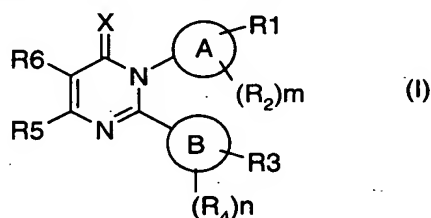
5-Carboxamido-2-(4-fluorophenyl)-1-[4-(methylsulfonyl)phenyl]-4-morpholin-4-yl-6-oxo-1,6-dihydropyrimidine;  
 5-Carboxamido-1-(3,4-dimethylphenyl)-4-(methylsulfonyl)-2-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 5-Cyano-2-(4-fluorophenyl)-4-hydroxy-1-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 5-Cyano-1-(3,4-dimethylphenyl)-4-hydroxy-2-[4-(methylsulfonyl)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 5-Cyano-4-(methylamino)-1-(4-methylphenyl)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 5-Cyano-1-(3,4-dimethylphenyl)-4-(methylamino)-2-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 5-Cyano-2-(4-fluorophenyl)-4-(methylamino)-1-[4-(methylthio)phenyl]-6-oxo-1,6-dihydropyrimidine;  
 4-[5-Cyano-1-(3,4-dimethylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]benzenesulfonyl chloride;  
 4-[5-Cyano-2-(4-ethoxyphenyl)-4-(methylthio)-6-oxopyrimidin-1(6H)-yl]benzenesulfonyl chloride;  
 4-[5-Cyano-1-(4-methylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]benzenesulfonamide;  
 N-({4-[5-Cyano-1-(4-methylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]phenyl} sulfonyl)acetamide;  
 N-({4-[5-Cyano-1-(3,4-dimethylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]phenyl} sulfonyl)acetamide;  
 N-({4-[5-Cyano-1-(4-methylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]phenyl} sulfonyl)-2,2,2-trifluoroacetamide;

*N*-({4-[5-Cyano-1-(3,4-dimethylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]phenyl} sulfonyl)-2,2,2-trifluoroacetamide;

*N*-({4-[5-Cyano-1-(4-methylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]phenyl} sulfonyl)benzamide and

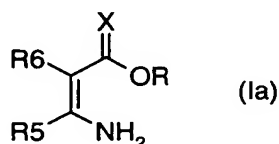
*N*-({4-[5-Cyano-1-(3,4-dimethylphenyl)-4-(methylthio)-6-oxo-1,6-dihydropyrimidin-2-yl]phenyl} sulfonyl)benzamide.

4. A process for the preparation of novel pyrimidones of the formula (I)

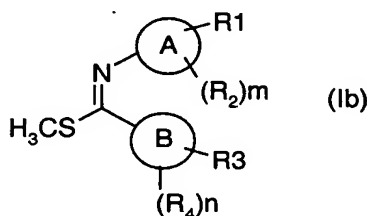


their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, and their pharmaceutically acceptable salts, wherein X represents oxygen, sulfur or NR, wherein R represents hydrogen, hydroxyl, acyl, alkyl, alkoxy, aryl, amino, hydroxylamino, alkylamino, arylamino, acylamino, alkoxyamino group; the rings represented by A and B are selected from aryl or heteroaryl; R<sup>1</sup> and R<sup>3</sup> may be same or different and independently represent hydrogen, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>; R<sup>2</sup> and R<sup>4</sup> may be same or different and independently represent hydrogen, halogen, hydroxyl, nitro, cyano, azido, nitroso, amino, formyl, alkyl, haloalkyl, acyl, alkoxy, monoalkylamino, dialkylamino, acylamino, alkoxycarbonyl, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>, alkoxyalkyl groups or carboxylic acids or its derivatives; R<sup>5</sup> and R<sup>6</sup> may be same or different and independently represent hydrogen, halogen, hydroxyl, nitro, cyano, azido, nitroso, amino, formyl, alkyl, aryl, aralkyl, haloalkyl, acyl, alkoxy, aryloxy, aralkoxy, heteroaryl, heterocyclyl, monoalkylamino, dialkylamino, acylamino, alkoxycarbonyl, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>, alkoxyalkyl groups or COR<sup>9</sup>; R<sup>7</sup> represents hydrogen, alkyl or aryl; R<sup>8</sup> represents halogen, alkyl, amino, acylamino, arylamino or aryl group; R<sup>9</sup> represents hydrogen, hydroxyl, amino, halogen, alkyl, alkoxy, aryloxy,

monoalkylamino, dialkylamino, acylamino, arylamino, groups; m is an integer and is in the range of 0 to 4; n is an integer and is in the range of 0 to 4; p represents an integer of 1 or 2; with a proviso that when R<sup>1</sup> represents hydrogen R<sup>2</sup> is not hydrogen, which comprises reacting a compound of the formula (Ia)

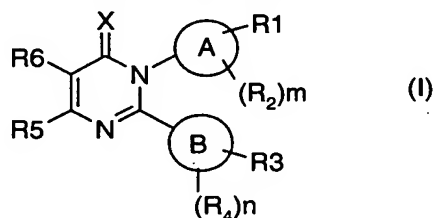


where R represent (C<sub>1</sub>-C<sub>3</sub>) alkyl group, X, R<sup>5</sup> and R<sup>6</sup> are as defined above, with a compound of the formula (Ib)



wherein all symbols are as defined above, to produce a compound of formula (I).

5. A process for the preparation of novel pyrimidones of the formula (I)



their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, and their pharmaceutically acceptable salts, wherein X represents oxygen, sulfur or NR, wherein R represents hydrogen, hydroxyl, acyl, alkyl, alkoxy, aryl, amino, hydroxylamino, alkylamino, arylamino, acylamino, alkoxyamino group; the rings represented by A and B are selected from aryl or heteroaryl; R<sup>1</sup> and R<sup>3</sup> may be same or different and independently represent hydrogen, SR<sup>7</sup>, S(O)<sub>p</sub>R<sup>8</sup>; R<sup>2</sup> and R<sup>4</sup> may be same or different and independently represent hydrogen, halogen, hydroxyl,



integer of 1 or 2; with a proviso that when R<sup>1</sup> represents h  
which comprises reacting a compound of the formula (Ic)

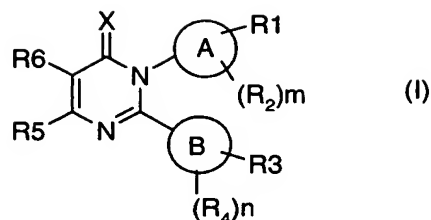


with a compound of the formula (Id)



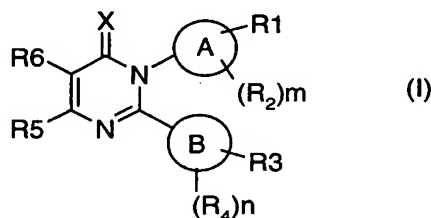
wherein all symbols are as defined above, to produce a compound of formula (I)

6. A process for the conversion of novel pyrimidones of the formula (I) as claimed in claim 1,



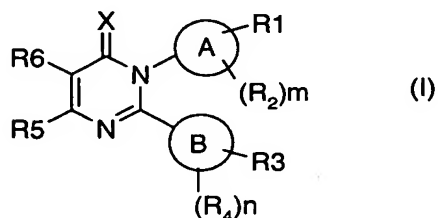
wherein any one of the groups  $R^1$  and  $R^3$  represent  $SR^7$ , wherein  $R^7$  represents alkyl or aryl and all other symbols are as defined in claim 1, to novel pyrimidones of the formula (I) wherein any one of the groups  $R^1$  and  $R^3$  represent  $S(O)_pR^8$ , where p represents 1 or 2 and  $R^8$  represents alkyl or aryl, and all other symbols are as defined above, using an oxidizing agent.

7. A process for the conversion of novel pyrimidones of the formula (I) as claimed in claim 1,

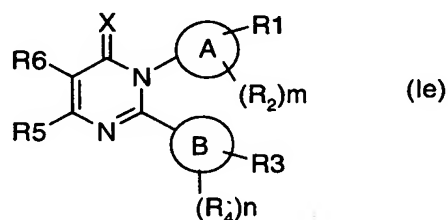


wherein any one of the groups  $R^1$  and  $R^3$  represent  $S(O)_pR^8$ , where p is 1 or 2,  $R^8$  represents alkyl or aryl and all other symbols are as defined in claim 1, to novel pyrimidones of the formula (I) wherein any one of the groups  $R^1$  and  $R^3$  represent  $S(O)_pR^8$ , where p is 1 or 2,  $R^8$  represents amino group and all other symbols are as defined in claim 1.

8. A process for the conversion of novel pyrimidones of the formula (I) as claimed in claim 1,

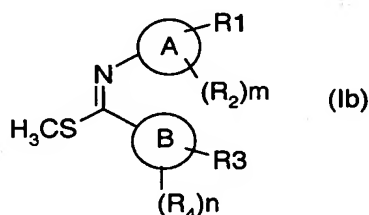


wherein either of the groups  $R^1$  or  $R^3$  represent  $S(O)_pR^8$ , wherein  $R^8$  represents amino group and  $p$  represents an integer of 1 or 2 and all other symbols are as defined in claim 1, which comprises reacting compound of formula (Ie)



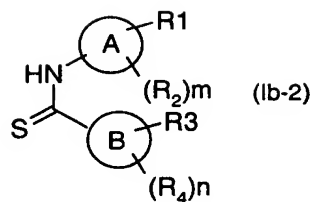
wherein  $R^1$  or  $R^3$  represents hydrogen and all other symbols are as defined in claim 1, with chlorosulfonic acid and ammonia.

9. A compound of formula (Ib)



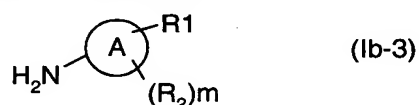
their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, and their pharmaceutically acceptable salts, wherein  $R^1$  and  $R^3$  may be same or different and independently represent hydrogen,  $SR^7$ ,  $S(O)_pR^8$ ;  $R^2$  and  $R^4$  may be same or different and independently represent hydrogen, halogen, hydroxyl, nitro, cyano, azido, nitroso, amino, formyl, alkyl, haloalkyl, acyl, alkoxy, monoalkylamino, dialkylamino, acylamino, alkoxycarbonyl,  $SR^7$ ,  $S(O)_pR^8$ , alkoxyalkyl groups or carboxylic acids or its derivatives;  $R^7$  represents hydrogen, alkyl or aryl;  $R^8$  represents halogen, alkyl, amino, acylamino, arylamino or aryl group;  $m$  is an integer and is in the range of 0 to 4;  $n$  is an integer and is in the range of 0 to 4;  $p$  represents an integer of 1 or 2.

10. A process for the preparation of compound of formula (Ib) as defined in claim 9, which comprises, methylating the compound of formula (Ib-2)

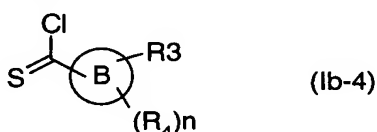


wherein all symbols are as defined in claim 9, using a methylating agent.

11. A process for the preparation of intermediate of formula (Ib-2), which comprises, reacting compound of formula (Ib-3)

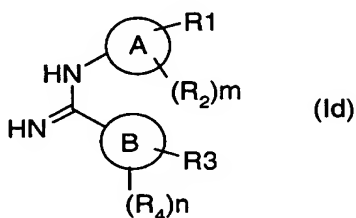


where  $R_1$  and  $R_2$  all are as defined in claim 9 with compound of formula (Ib-4)



where all symbols are as defined in claim 9.

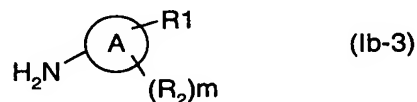
12. A compound of formula (Id)



their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, and their pharmaceutically acceptable salts, wherein  $R^1$  and  $R^3$  may be same or different and independently represent hydrogen,  $SR^7$ ,  $S(O)_pR^8$ ;  $R^2$  and  $R^4$  may be same or different and independently represent hydrogen, halogen, hydroxyl, nitro, cyano, azido, nitroso, amino, formyl, alkyl, haloalkyl, acyl, alkoxy, monoalkylamino, dialkylamino, acylamino, alkoxycarbonyl,  $SR^7$ ,  $S(O)_pR^8$ , alkoxyalkyl groups or carboxylic acids or its derivatives;  $R^7$  represents hydrogen,

alkyl or aryl;  $R^8$  represents halogen, alkyl, amino, acylamino, arylamino or aryl group;  $m$  is an integer and is in the range of 0 to 4;  $n$  is an integer and is in the range of 0 to 4;  $p$  represents an integer of 1 or 2.

13. A process for the preparation of compound of formula (Id) as defined in claim 12, which comprises, reacting compound of formula (Ib-3)

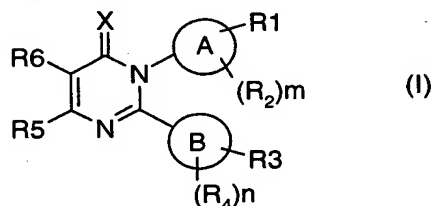


where  $R_1$ ,  $R_2$  and  $m$  are as defined in claim 12, with compound of formula (Id-1)



where all symbols are as defined in claim 12, in the presence of catalysts and solvent.

14. A pharmaceutical composition which comprises a compound of formula (I)



as defined in claim 1 and a pharmaceutically acceptable carrier, diluent, excipient or solvate.

15. A pharmaceutical composition as claimed in claim 14, in the form of a tablet, capsule, powder, syrup, aerosol, solution or suspension.

16. A pharmaceutical composition which comprises a compound as claimed in claim 3 and a pharmaceutically acceptable carrier, diluent, excipient or solvate.

17. A pharmaceutical composition as claimed in claim 16, in the form of a tablet, capsule, powder, syrup, aerosol, solution or suspension.

18. Use of a compound of formula (I) as claimed in claim 1, for the prophylaxis or treatment of rheumatoid arthritis; osteoporosis; multiple myeloma; uveitis; acute

and chronic myelogenous leukemia; ischemic heart disease, atherosclerosis, cancer, ischemic-induced cell damage, pancreatic  $\beta$  cell destruction; osteoarthritis; rheumatoid spondylitis; gouty arthritis; inflammatory bowel disease; adult respiratory distress syndrome (ARDS); psoriasis; Crohn's disease; allergic rhinitis; ulcerative colitis; anaphylaxis; contact dermatitis; asthma; muscle degeneration; cachexia; type I and type II diabetes; bone resorption diseases; ischemia reperfusion injury; atherosclerosis; brain trauma; multiple sclerosis; cerebral malaria; sepsis; septic shock; toxic shock syndrome; fever, and myalgias due to infection. HIV-1, HIV-2, HIV-3, cytomegalovirus (CMV), influenza, adenovirus, the herpes viruses (including HSV-1, HSV-2), and herpes zoster infection.

19. Use of a compound as claimed in claim 3, for the prophylaxis or treatment of rheumatoid arthritis; osteoporosis; multiple myeloma; uveitis; acute and chronic myelogenous leukemia; ischemic heart disease, atherosclerosis, cancer, ischemic-induced cell damage, pancreatic  $\beta$  cell destruction; osteoarthritis; rheumatoid spondylitis; gouty arthritis; inflammatory bowel disease; adult respiratory distress syndrome (ARDS); psoriasis; Crohn's disease; allergic rhinitis; ulcerative colitis; anaphylaxis; contact dermatitis; asthma; muscle degeneration; cachexia; type I and type II diabetes; bone resorption diseases; ischemia reperfusion injury; atherosclerosis; brain trauma; multiple sclerosis; cerebral malaria; sepsis; septic shock; toxic shock syndrome; fever, and myalgias due to infection. HIV-1, HIV-2, HIV-3, cytomegalovirus (CMV), influenza, adenovirus, the herpes viruses (including HSV-1, HSV-2), and herpes zoster infection.

20. Use of a composition as claimed in claim 14, for the prophylaxis or treatment of rheumatoid arthritis, Paget's disease, osteoporosis, multiple myeloma, uveitis, acute or chronic myelogenous leukemia, pancreatic  $\beta$  cell destruction, osteoarthritis, rheumatoid spondylitis, gouty arthritis, inflammatory bowel disease, adult respiratory distress syndrome (ARDS), psoriasis, Crohn's disease, allergic rhinitis, ulcerative

colitis, anaphylaxis, contact dermatitis, asthma, muscle degeneration, cachexia, Reiter's syndrome, type I diabetes, type II diabetes, bone resorption diseases, graft vs. host reaction, Alzheimer's disease, stroke, myocardial infarction, ischemia reperfusion injury, atherosclerosis, brain trauma, multiple sclerosis, cerebral malaria, sepsis, septic shock, toxic shock syndrome, fever, myalgias due to HIV-1, HIV-2, HIV-3, cytomegalovirus (CMV), influenza, adenovirus, the herpes viruses or herpes zoster infection.

21. Use of a compound of formula (I) as claimed in claim 1 for lowering plasma concentrations of either or both TNF- $\alpha$  and IL-1.
22. Use of a compound as claimed in claim 3 for lowering plasma concentrations of either or both TNF- $\alpha$  and IL-1.
23. Use of a composition as claimed in claim 14 for lowering plasma concentrations of either or both TNF- $\alpha$  and IL-1.
24. Use of a compound of formula (I) as claimed in claim 1 for lowering plasma concentrations of either or both IL-6 and IL-8.
25. Use of a compound as claimed in claim 3 for lowering plasma concentrations of either or both IL-6 and IL-8.
26. Use of a composition as claimed in claim 14 for lowering plasma concentrations of either or both IL-6 and IL-8.
27. Use of a compound of formula (I) as claimed in claim 1 for the prophylaxis or treatment of a pain disorder.
28. Use of a compound as claimed in claim 3 for the prophylaxis or treatment of a pain disorder.
29. Use of a composition as claimed in claim 14 for the prophylaxis or treatment of a pain disorder.
30. Use of a compound of formula (I) as claimed in claim 1 for decreasing prostaglandin production.

31. Use of a compound as claimed in claim 3 for decreasing prostaglandin production.
32. Use of a composition as claimed in claim 14 for decreasing prostaglandin production.
33. Use of a compound of formula (I) as claimed in claim 1 for decreasing cyclooxygenase enzyme activity.
34. Use of a compound according to claim 33, wherein the cyclooxygenase enzyme is COX-2 or COX-3.
35. Use of a compound as claimed in claim 3 for decreasing cyclooxygenase enzyme activity.
36. Use of a compound according to claim 35, wherein the cyclooxygenase enzyme is COX-2 or COX-3.